

## The Future of Life: A Guide to Save the Planet

### Summary

Edward O. Wilson presents what may arguably be the question of the century in his book *The Future of Life*, and that question is how can humanity continue to live without destroying the biosphere that sustains us. Wilson presents the facts on human consumption, and which way the Earth is heading if we do not change our ways. As an expert biologist, E. O. Wilson is dedicated to preserving the delicate life that is still present.

The book has three recurring themes throughout: the first is ethics and morals, the second is how conservation can be economically friendly, and the third is how biodiversity creates more biodiversity. Wilson argues that the conservation of the biosphere will come down to these three ideas. The first idea of morals and ethics is a major idea in the book. Chapter 2 discusses how humanity and the rest of life is passing through a bottleneck, and if we do not get the population growth at or under zero, then the biosphere will eventually die completely (Wilson 2002:29). Human ethics will be the only way humanity and the biosphere will make it through the bottleneck (Wilson 2002:41). Chapter 3 talks about the Polynesians, and how their lack of ethics has destroyed what used to be “as close to Eden as any land that ever existed” (Wilson 2002:43). Wilson describes how beautiful Hawaii was before any settlers colonized the islands, with its own unique endemic species. Even though the islands still seem biologically diverse, Wilson argues that many of these species are artificial. Included in this chapter is the acronym HIPPO, referring to habitat destruction, invasive species, pollution, population, and overharvesting (Wilson 2002:50). If humans continue to destroy habitats, pollute, and overharvest, then eventually there will be nothing left but memories of what it used to be like. Wilson makes it clear through the Polynesians and facts about HIPPO that conservation will be heavily based on human ethics. Chapter 4 mentions the realities of mass extinction occurring right before our eyes. The Sumatran rhino is referred to many times throughout the chapter, because Wilson tells us that it is due to overharvesting that this special animal is one of the rarest species in the world (Wilson 2002:79). Wilson suggests that it is our moral obligation to save these dying animals, because

we are largely to blame. He describes endangered species not as a sick patient in a hospital, but as healthy individuals that just need some space and time (Wilson 2002:83).

Another theme that occurs throughout the book is that of economics. How can conservation be profitable is one of the questions Wilson asks. Chapter 5 talks about what the biosphere has to offer financially, such as medicine, and clean water. Wilson describes how New York City saved around 5 billion dollars by taking advantage of the natural Catskill Watershed rather than building a water treatment plant (Wilson 2002:107). Nature's medicines are another financial gain from the biosphere. Instead of clear cutting forest and destroying the habitat, we can gain more financially by harvesting medicines while still keeping the habitats diversity (Wilson 2002:125). Chapter 7 discusses the solution to saving the Earth's diversity. Wilson tells of the importance of reserves, and how they will be a necessity to the solution. He goes on to list how much it will cost to maintain these reserves, saying in one example that with a one-cent-per-cup tax increase on coffee will finance the world's existing reserves (Wilson 2002:164). Wilson also mentions that if humans continue to clear forest, eventually there will be no more forest to cut, and therefore no more jobs (Wilson 2002:168). This will in turn lead to an economic downfall resulting in what may be worse than the Great Depression.

Finally, biodiversity creating more biodiversity is a major theme that is seen throughout the book. Chapter 1 talks about life being found anywhere there is water. The McMurdo Dry Valleys of Antarctica is a place with extreme harsh environmental conditions, yet life is still present. Because of a single-celled algae, other life forms are able to live in these harsh conditions. Copepods and krill consume the algae, and fish consume the crustaceans (Wilson 2002:5). A single-celled algae creates the opportunity for more biodiversity. Chapter 5 describes the use of ecosystem engineers to help create more biodiversity. By altering or changing the environment in some manner, the engineer creates opportunities for other species to exist in the habitat, strengthening the overall health of the ecosystem (Wilson 2002:110). In the chapter Wilson says, "Biodiversity grows more biodiversity, and the overall abundance of plants, animals, and microorganisms increase to a corresponding degree" (Wilson 2002:110). Chapter 6 discusses the idea of biophilia, which is a theory of how humans inevitably return to their ancestral environment resembling a savannah (Wilson 2002:134). Wilson argues that many decisions that humans make regarding their surrounding environment involve a basic instinct that reverts back to ancestral times. This follows the idea that biodiversity creates more biodiversity, because according to the theory if the biodiversity resembles that of a savannah, then humans will want to inhabit the land, adding to the biodiversity of the ecosystem.

### Critique

E. O. Wilson writes in a way that is both scientific and enjoyable. He is able to present the facts and information in a way that is easy to understand. The book allowed me to gain more knowledge on topics that were covered during lectures, such as population growth, bottlenecks, and diversity of life. Wilson brought up population growth many times throughout the book, explaining human population growth. He discussed factors that can influence human population growth, such as advances in medicine and technologies, the empowerment of women, wars and epidemics, and other natural and artificial causes (Wilson 2002:30). Population bottlenecks were another topic that Wilson touched on. I learned that humans, as well as all life in general is going through a bottleneck right now. The human population keeps rising, and both land and food are not. Wilson mentions that it would take four Earths to sustain the human population if everyone were to be at the United States' level of consumption (Wilson 2002:150). If the human population continues to rise, then many of Earth's species will not make it through the bottleneck. Another concept that I gained extra knowledge about was diversity of life. Wilson made it very clear that biodiversity makes more biodiversity. To me this is a good enough reason to take part in conservation. This means that the extinction of one species ultimately has a great affect on other species, and can lead to the extinction of other species. Wilson also brought up the ecosystem engineers, and how they affect the biodiversity of an area. By altering the environment around them, they are able to increase both the biodiversity, and the health of the ecosystem (Wilson 2002:110).

One comment that I have on the book is the final chapter. Wilson presented all of the mistakes that humanity has made, as well as everything that is wrong with the environment, but in the final chapter labeled "The Solution," he does not give the solution based on an individual basis. Instead, Wilson gives group solutions that require the authority of those in power. Rather than suggesting families to reduce their levels of consumption, or planting trees and increasing biodiversity around them, he suggests to stop all logging, salvage the world's hot spots, and make conservation profitable (Wilson 2002:160). He does not make it easy for individuals, which I believe is the first step to the solution. Another problem I see with the final chapter is how much emphasis he puts in the donation of money to different conservation organizations. I understand that it takes money to conserve, but he gives so many examples that it is hard to know which organization is the best to contribute to, which will do the most with that money, and how much to give. It is hard for people to part with their money, and not knowing enough facts will ultimately effect their decision.

Overall, I enjoyed the book, because it put the future in prospective. It showed me what will happen if humanity does not change, or what will happen if we start now to save the Earth from destruction. It also showed me all of nature's benefits, from medicine to

economics, which I did not know prior to reading the book. I would recommend the book to anyone interesting in biology, the future, or even an economic enthusiast.

#### Literature Cited

Wilson, E. O. 2002. *The Future of Life*. Vintage Books, New York.